## INTERSPECIFIC HELPING BEHAVIOR: HOUSE SPARROWS AT BALTIMORE ORIOLE AND EASTERN KINGBIRD NESTS

## by Kenneth Hudson

During the summer of 1999, I observed several instances of interspecific helping behavior involving House Sparrows (*Passer domesticus*). On June 22, 1999, at 11:20 a.m., I was checking up on a Baltimore Oriole (*Icterus galbula*) nest in the Boston Public Garden. This was the second year in a row that a pair of orioles bred there, building their nest in a weeping willow at the edge of the lagoon both times. On this occasion I was very surprised to see a female House Sparrow apparently feeding the nestlings. At least six times while I watched, the sparrow came to the oriole nest carrying something (presumably food) in her beak. Each time she entered the nest head-first, upon which the characteristic loud begging calls of oriole nestlings could be heard. Then she would emerge empty-beaked, fly off, and return a couple of minutes later to repeat the performance.

Reluctant at first to credit the evidence of my own eyes, I tried to explain away the sparrow's strange behavior. I reasoned that the orioles must have already fledged, and the nest had been taken over by a pair of House Sparrows. But then the female oriole put in an appearance, entering the nest to feed the young birds. Also, the frantic calls coming from inside the nest were not being made by House Sparrows. Still grasping for an explanation, I speculated that two different species were simultaneously raising their broods in one nest. Upon reflection, I decided that Occam's Razor should be invoked: among two or more possible explanations for one set of observations, the simplest explanation is probably the correct one. In this case, the simplest explanation was that a House Sparrow was sharing the task of feeding a brood of young orioles.

At 2:50 p.m., I returned to watch the nest. Again, I saw the House Sparrow make several visits to the nest. The female oriole also came to the nest, but less frequently than the sparrow. At no time did I see them together. The male oriole could be heard singing not far away, but I did not see him in the willow.

Just after 5:30 p.m. I found a stubby-tailed young oriole perched a few centimeters directly above the nest. The pointed bill and orange tinge left no doubt that it was an oriole, not a sparrow. Seeming to ignore the just-fledged bird, the House Sparrow continued to feed the remaining occupants of the nest.

The next morning at 6:10 a.m., I saw the House Sparrow feed the newlyfledged oriole. She did this twice while I watched. She also entered the nest to feed the remaining nestlings. I saw the male oriole flying overhead, but he did not come near the nest. On subsequent visits to the Public Garden, I did not see any orioles, nor did I hear vocalizations from the nest, but I did hear adult and young orioles vocalizing nearby. I cannot say if the House Sparrow continued to play any role in the care or feeding of the young orioles.

Coincidentally, in July I observed behavior suggesting that House Sparrows were attempting to feed Eastern Kingbird (*Tyrannus tyrannus*) chicks nearby. On July 3, I confirmed that the Public Garden's resident Eastern Kingbirds were nesting for the fourth consecutive year. Within fifteen minutes of discovering the nest, I saw a female House Sparrow try to approach it. She did this six times, five times from below, and once from the side. When coming up from below the nest she got to within 45 centimeters before one of the kingbirds drove her away. She got a bit closer to the nest when approaching from the side, coming to within about 20 centimeters. But again, one of the kingbirds shooed her away. I could not see what, if anything, the nest contained. For almost two weeks after this date I did not notice any unusual activity involving House Sparrows near the kingbird nest.

On July 15 at the Charles River Esplanade, about a half-mile from the Public Garden, I heard kingbirds calling. I spotted three recently-fledged birds in a locust tree. All had stubby tails but seemed able to fly reasonably well for short distances. Almost immediately I also noticed a female House Sparrow. This bird was perched on the same twig as one of the kingbirds, and was close enough to touch it. The young kingbird turned its head toward the House Sparrow, opened its beak, and fluttered its wings. The House Sparrow then turned its own head to face the kingbird. Due to distance and the positions of the birds, I was not able to tell if the House Sparrow actually fed the kingbird. After two or three minutes, during which the sparrow stayed close to the young kingbird, an adult kingbird alighted within a few centimeters of them. The House Sparrow immediately flew off. The adult kingbird did not chase it, but devoted its entire attention to feeding the fledgling. The House Sparrow soon joined two other House Sparrows, and eventually they departed together.

On July 17, back at the Public Garden, I saw an adult kingbird perched onehalf meter above its nest. On the same twig as the kingbird and about 30 centimeters from it was a female House Sparrow. The two maintained their respective positions for one minute. Five minutes later I glimpsed an adult kingbird on the nest. By now the House Sparrow had descended to a perch level with the nest, about 15 centimeters from it. The two birds were facing one another, but gave no indication of reacting to each other. After 30 seconds the sparrow flew away.

In a book titled *Helpers at Birds' Nests*, Alexander Skutch (1999) refers to House Sparrows feeding a variety of other species, including Eastern Kingbirds, but he doesn't mention orioles. House Sparrows apparently frequently help conspecific pairs as well as members of other species, but they are not considered to be truly cooperative breeders (see Hersek, this issue). Skutch suggests that this behavior often results from the strong innate urge to feed

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nestlings, and that it probably occurs in most species — we just haven't observed them carefully enough to notice it.

## References

Skutch, Alexander F. 1999. Helpers at Birds' Nests: A Worldwide Survey Of Cooperative Breeding And Related Behavior. Iowa City: University of Iowa Press.

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Eastern Kingbird nestlings in Arlington, MA - digital image by Marjorie W. Rines